

## PRESENTATION HANDOUT 2

### Bureau of Land Management BLM UTAH RENEWABLE ENERGY PROJECT OVERVIEW August 17, 2010

**Background:** Secretarial Order No. 3283 advanced the Department of the Interior's efforts to achieve the goal that Congress set in Section 211 of the Energy Policy Act of 2005, which calls for the development of 10,000 megawatts (MW) of non-hydropower renewable energy projects on the public lands by 2015. The order authorized the BLM to establish renewable energy coordination offices to expedite the permitting of wind, solar, geothermal, and biomass projects, along with needed electrical transmission facilities, on BLM-managed lands.

BLM established renewable energy coordination offices (RECO) through the allocation of additional positions in four RECO designated states including Arizona (10 positions), California (21), Nevada (22), and Wyoming (10). Additional renewable energy program support positions were allocated to the Washington Office (6), Colorado (11), Idaho (6), Montana (5), New Mexico (4), Oregon (4), and Utah (5). BLM Utah's positions included a Renewable Energy Program Lead at the Utah State Office; realty specialist, term archeologist and term biologist in the Cedar City Field Office (FO); and a realty specialist in the Salt Lake FO. All positions were filled during FY09.

Table 1 summarizes BLM Utah's Renewable Energy Project activity for wind, solar, geothermal, and biomass energy development. Table 2 lists ongoing major power transmission Rights of Way (ROW) projects on the public lands in Utah.

**Wind Energy:** From FY03 to date, BLM Utah has received a total of 35 wind meteorological (met) tower testing ROWs. The majority of wind met tower ROW applications have been submitted to the Salt Lake, Fillmore, and Cedar City FOs. A total of 19 met tower ROWs have been processed. Currently, there are 16 pending applications. Ongoing program challenges include: project applicants applying for large areas of land with testing proposed by single tower installations as a means to hold land for speculation; protracted Department of Defense (DOD) consultations (e.g., one year) on applications that are in or abut military operation areas; and extended application approval times as a result of awaiting the submission of complete ROW application information. A total of 137 met towers have been approved for installation on approximately 687,000 federal acres.

Two wind development project ROWs have been approved by the Cedar City and Fillmore FOs within the Milford Wind Development Corridor north of Milford, UT. First Wind's Phase I is now operational with 28 wind turbines (42 MW) on BLM land (97 total turbines erected). In April of this year, the Cedar City and Fillmore FOs approved the Milford Project Phase II ROW Grant and Notice-to-Proceed which provides for the construction of 33 additional turbines (49.5 MW) on BLM land (Phase II has a total 66 turbines). On June 1, 2010, First Wind submitted a cost recovery agreement to the Fillmore FO to initiate work in support of the Phase III ROW application which BLM expects to receive this fall. Tentative plans for Phase III encompass the construction of approximately 275 turbines (300-400 MW) on 44,000 acres.

**TABLE 1: BLM UTAH  
RENEWABLE ENERGY PROJECT ACTIVITY SUMMARY  
August 17, 2010**

Renewable Energy Program Action or Description	Totals	West Desert District		Color Country District		Canyon Country	Green River
		Salt Lake	Fillmore	Cedar City	St. George	Monticello	Vernal
WIND ENERGY							
Wind Testing and Monitoring ROWs							
Applications Received	35	8	7	14	2	1	3
Withdrawn/Rejected	5	-	1	4	-	-	-
Authorized	14	2	3	6	1	1	1
Pending	16	6	3	4	1	-	2
Wind Project Development ROWs							
Applications Received	5	-	See Note <sup>1</sup>	5	-	-	-
Authorized	3	-	-	3	-	-	-
Pending	2	-	-	2	-	-	-
Federal Wind Testing and Development Infrastructure							
No. of Wind Met Towers	137	13	27	53	26	1	17
No. of Wind Turbines	61	-	-	61	-	-	-
Capacity in Megawatts	91.5	-	-	91.5	-	-	-
<sup>1</sup> Note: The Fillmore FO received First Wind's Milford Wind Corridor Development Project - Phase III ROW Cost Recovery Agreement on 6/1/10 for a 300-400 MW Project Site Addition.							
GEO THERMAL ENERGY							
Geothermal Leases (Number of Leases / Total Acres)							
Authorized	59 / 162,205	-	46 / 149,843	13 / 12,362	-	-	-
Lease Nominations	4 / 8,035	-	2 <sup>2</sup> / 2,395	2 / 5,641	-	-	-
Federal Geothermal Infrastructure							
No. of Geothermal Wells	51	-	-	51	-	-	-
No. of Geotherma Plants	2	-	-	2	-	-	-
Capacity in Megawatts	47	-	-	47	-	-	-
<sup>2</sup> Note: The two Fillmore FO Geothermal Lease Nominations are located on USFS Surface Estate. BLM is responsible the Leasing and Well / Facility Permitting.							
SOLAR ENERGY							
Solar Energy Facility Development ROWs							
Apps. Rejected/Withdrawn	3	1	-	2	-	-	-
Solar Programmatic EIS Actions (Number of Zones / Total Acres)							
Federal Solar Energy Zones <sup>3</sup>	3 / 19,185	-	-	3 / 19,185	-	-	-
<sup>3</sup> Note: Solar Energy Zones include Escalante Valley (6,648 acres), Milford Flats South (6,440 acres), and Wah Wah Valley (6,097 acres).							
BIOMASS ENERGY							
Biomass Energy Development - Resource Assessments							
DOE Funded Study	In FY10, BLM Utah received DOE funding to conduct a Biomass Energy Resource Assessment for the Kanab FO area. The assessment will also include a general analysis of resource potential statewide on BLM and USFS lands. The study is under contract to the University of Virginia.						
Biomass Energy Development - Interagency, Academic, and Industry Collaboration							
Statewide Work Group	A statewide Biomass Energy Work Group has been meeting informally during FY09-10 and is now being formally chartered. The Unversity of Utah will be facilitating the working group. BLM Utah is participating with the USFS, US Dept. of Agriculture, state agencies, universities, and industry.						
BLM UTAH - TOTAL RENEWABLE ENERGY PRODUCTION AUTHORIZED BY PERMIT							
Capacity in Megawatts	138.5	-	-	138.5	-	-	-

Two wind development project ROWs are currently pending. Both are located in the Cedar City FO. The Harmony Mountain Wind Project (43 turbines) is awaiting the completion of a DOD consultation which has now surpassed one year. A final decision is expected at any time. The Mineral Mountain Wind Project (53 turbines) has been postponed due to the need for additional wind testing. BLM is currently awaiting a decision by the project applicant to either proceed with the ROW approval or to withdraw the project entirely.

**Solar Energy:** Unlike California, Nevada, and Arizona, BLM Utah currently has no ongoing utility-scale solar energy development due to current project economics. In FY07, the Salt Lake FO received a solar development ROW application (Table 1 – Solar Energy). The application was later withdrawn. In FY08, the Cedar City FO received two applications which were subsequently rejected due to an unresponsive applicant not providing a complete ROW application submission.

As a component of the BLM Washington Office's development of the Draft Solar Programmatic EIS (PEIS), the BLM WO, DOE, and BLM Utah identified three Solar Energy Zone (SEZ) areas located within the Cedar City FO having the best potential for utility-scale solar energy development with very low to non-existent land use conflicts. These sites include Escalante Valley SEZ (6,648 acres), Milford Flats South SEZ (6,440 acres), and Wah Wah Valley (6,097 acres).

Currently, BLM Utah is providing support to the development of the Draft Solar PEIS through coordinated field review of the contractor (Argonne National Lab) developed documentation in coordination with the Washington Office. The Draft PEIS is planned for completion in December of 2010.

**Geothermal Energy:** Authorized geothermal lease, lease nomination, and geothermal energy infrastructure located on public land is shown in Table 1 – Geothermal Energy. For a more detailed briefing on specific Geothermal Program Activity detail please see the *BLM Utah Geothermal Resource* briefing paper.

**Biomass Energy:** BLM Utah currently has no biomass energy being utilized from the public lands. This program is relatively new and is currently in the process of beginning resource assessments as well as establishing a working group including participants from other federal and state agencies, academia, and industry.

Opportunities have been identified to utilize woody biomass resources that are available from ongoing treatment of invasive wood species and wood debris resulting from normal timber management activities on BLM and USFS lands.

During FY10, BLM Utah received DOE grant funding to conduct a woody biomass resource assessment for the Kanab FO. This assessment will also provide a broad review of resource availability on a statewide basis. The University of Virginia has been contracted by DOE to conduct the analysis. This work is now underway and is being fostered by an interagency and industry working group. In addition, the University of Utah has agreed to facilitate the

chartering and functioning of a Woody Biomass Energy Working Group. Participants include BLM, USFS, Dept. of Agriculture, State Forestry, the universities, and industry representatives.

**Major Transmission ROWs:** Currently there are two major interstate transmission ROW projects which encompass BLM lands within Utah (See Table 2) – the Gateway South (500 kV) and Transwest South (600 kV DC) Projects. These project EISs are in the NEPA scoping phase. Due to the physical design and the scale of the transmission projects, these projects are imparting considerable workload on the BLM Utah FOs as annotated within Table 2. These transmission projects are being managed by the Washington Office using BLM national project managers located in the BLM Wyoming State Office.

<b>TABLE 2: BLM UTAH</b> <b>MAJOR POWER TRANSMISSION ROW PROJECT SUMMARY</b> <b>June 3, 2010</b>									
Project Name / Capacity	Project Status	West Desert District		Color Country District				Canyon Country	Green River
		SLFO	FFO	CCFO	RFO	KFO	SGFO	Moab	VFO
Gateway South <sup>1</sup> / 500 kV	EIS Scoping	✓	✓	✓	✓	✓	✓	✓	-
Transwest Express <sup>2</sup> / 600 kV DC	EIS Scoping	✓	✓	✓	✓	✓	✓	✓	✓
Mona to Oquirrh / 500 kV	FEIS NOA	Prj. Lead	✓	-	-	-	-	-	-
Sigurd to Red Butte / 345 kV	EIS Scoping	-	✓	Prj. Lead	✓	-	-	-	-
<sup>1</sup> Note: Project Lead is WO-350 via National Project Manager located in the BLM Wyoming State Office									
<sup>2</sup> Note: Project Lead is WO-350 via National Project Manager located in the BLM Wyoming State Office									

BLM Utah is providing lead support for two major intrastate transmission ROW projects (See Table 2) – the Mona to Oquirrh (500 kV) and the Sigurd to Red Butte (345 kV) Projects. The Mona to Oquirrh Project has completed the Notice-of-Availability for the FEIS. The Sigurd to Red Butte Project EIS is in the NEPA scoping phase.